Sketch

MorphOS paint application

Manual

1. Introduction

Sketch is an image and photo editing software for computers that run MorphOS. I started work on this paint application 3 years ago together with Bartosz 'Nelson' Willim. After a short while we made quite a big application called „MOSPaint". This program had a lot of features (mostly unfinished) from modern paint applications like Photoshop or Gimp. While working on it we found that finishing this kind of huge app is a huge undertaking and can take years to finish, that's why we started to work on something smaller, something like M$-Paint but with more features - a MUI supported program. We called this app Sketch.
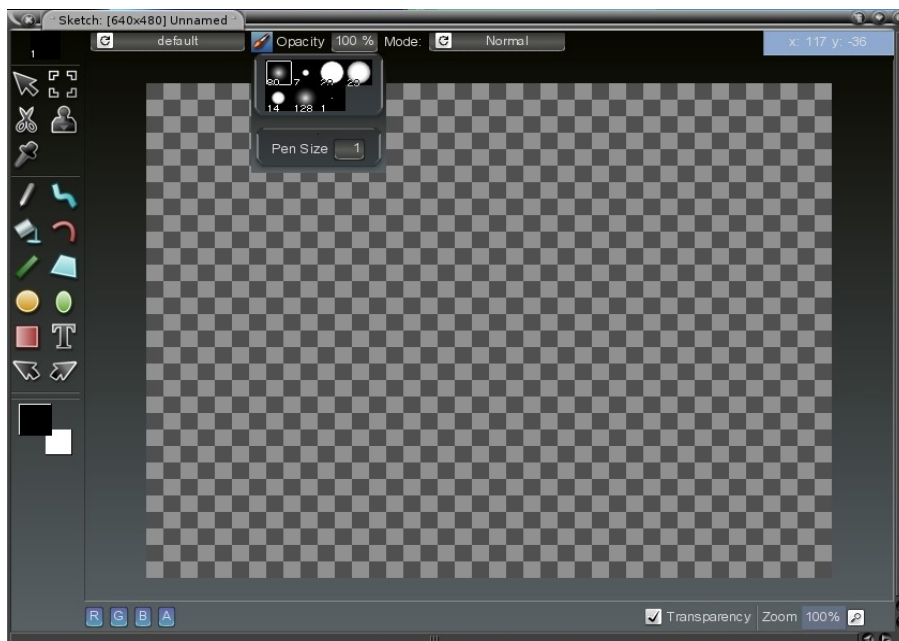
2. Options

2.1. Toolbar

 Select 	- use this option if you want to move clip area. Probably will be extended later to other options like text drawing. To use it hold LMB and move mouse.

 Clip size 	- this option is really useful when user want to draw only in special area (rectangle only). Clip areas are also used for effects if they were correctly written. To select clip size select one corner by setting up there mouse press LMB hold it and move to the end of area and release it.

 Cut brush 	- option to allows to cut part of the picture, use/save it or crop/extend picture. To use, move mouse to start point; press LMB hold it and move to the end of area and release it. It is also possible to modify area by entering values into opened crop window. To finish operation user must use one from options CROP or CUT BRUSH.
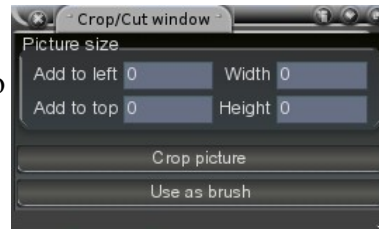
 Draw Brush 	- this function allows to draw a cut out area or loaded picture (Load Brush). When this option is enabled, rectangle is drawn on screen. LMB on the picture will draw brush on it.

Pick Color - function to take color from the picture. When this option is enabled every press of LMB is taken as action and color is taken from picture under mouse position.

Fill Area - will fill area by selected fill mode. This option is easy to use and there is only need to move mouse inside area that user want fill and then release LMB.

Draw Text - this function will draw text on the screen. The text and font drawn come from text gadgets that appear on the screen when draw text option is active. To draw text on screen move mouse pointer to the position where user want to have text and press LMB.

Pen Draw - draw pen shape on screen. To use it just press LMB and pen shape will be drawn on the picture under the mouse pointer.

Airbrush - draw continuously pen shapes between two different mouse positions. Pressing LMB will setup first point from where program start draw. Pen shapes are drawed on screen until user release LMB.

Draw Line - draw line between two points. First point is selected when user presses LMB and the last point when user releases LMB.

Polygons - draw lines between points and close area on the end. First setup mouse position to start polygon drawing position. Then start draw line after line until action double click on LMB will be done, key Enter will be pressed on keyboard. Next draw is done when user press LMB on new position. Start position for new polygon is the end of the last one.

Curve - draw curve between two points created from 4 points. First point is selected when user presses LMB and the last point when user releases it. In next steps new 2 points positions will be created, they will be placed between first and last point. To do this user must press LMB to setup point position, release of the button will set it up.

Circle - draw circle on the picture. To draw circle first setup mouse in position where the center of your circle will be. Holding LMB will define radius of the circle. Release LMB to draw shape on the screen.

Ellipse - this same as circle, the difference is only in that you draw an ellipse.

Rectangle - draw rectangle on picture. To draw it first move mouse pointer to the first corner position, press LMB and then hold it and move mouse to the second position. After LMB is released rectangle will be drawn on the picture.
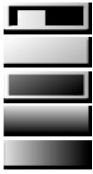
**Undo** - back to the picture before last operation.

Redo - back to the picture before, after last undo.

Fill Mode - 4 options are available to select:

       draw without filling,
       draw with Foreground color filling,
       draw with Foreground color filling and
       use Background color as frame,
       draw and fill by using Vertical gradient,
       draw and fill by using Horizontal gradient.

Pen - by pressing this button the sub window will appear. It is possible to select pen there from prepared one, select size (rescaling them) and edit by pressing LMB on pen preview (one pixel is drawn under mouse position). If user will select one of the prepared pen it will be used as default in application. Double click will do this same thing plus close pen window.
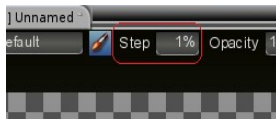
Step - option is used to skip points while drawing lines, rectangles, etc. If it's selected for pen with size 1 then 1% skip is equal to 1 pixel skip. With bigger pens percent of pen size is counted and used.

Opacity - draw in Normal/Dissolve Mode, Opacity sets the transparency for drawn shapes. For the rest of the modes it sets "effect" strength.
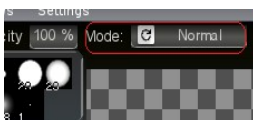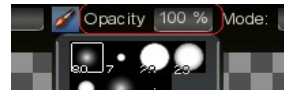
Mode - using this gadget setup draw mode:
Normal - draw pixels on screen by using pen and global opacity,
Dissolve - draw pixels in randomize positions in the pen area,
Add - add colors to the picture,
Subtract - subtract color from the picture,
Erase - remove alpha from picture, picture is going to be blank.

Pen types - Changing this option changes pen groups to select in pen sub window.
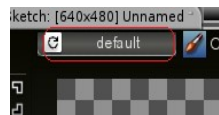
Progress - this gadget contains information to user what application is doing now or mouse coordinates if this option is enabled in preferences.

RGBA buttons – options will enable or disable colors and alpha value that should be used when painting.
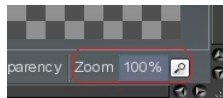
Transparency - by default this option is disabled. When it's enabled it allows you to see how your picture will look like with alpha channel.

Zoom - pressing this button will open a new sub window. Inside you will find a list with some zoom options. The sub window will close upon selecting an option.

2.2. Menu
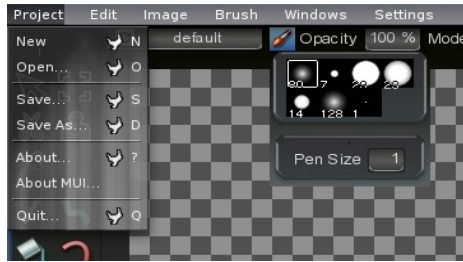
Project ------------------+
```
                          |
                          -New           - this option is used to create new picture,
                          |              select background color, select new picture size.
```

New picture window allows user to select new resolution and select new background color. There are also default resolutions available to select by using cycle gadget.

```
                          |
                          - Open         - open picture
                          |
                          - Save         - save picture under current name
                          |
                          - Save As      - save picture under selected path and name
```

Save window allows user to save actual picture. Some formats allow to set compression level or/and save with alpha channel.

```
                          |
                          - About - display information about Sketch application.
                          |
                          - About MUI    - display information about MUI.
                          |
                          - Quit                - simple:)
```

Edit ---------------------+
                        |

                        - Undo   - back to the picture before last operation.

                        - Redo   - back to the picture before, after last undo.

Image ------------------+
                        |

                        - Scale   - resize image by using algorithms:

                        | a. Normal (nearest),

                        | b. Box,

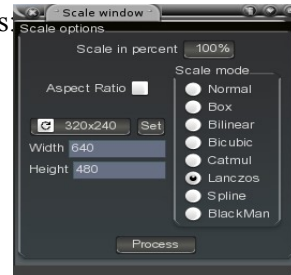 | c. Blinear,

                        | d. Bicubic,

                        | e. Catmul,

                        | f. Lanczos,

                        | g. Spline,

                        | h. BlackMan.

                        | It's also possible to use one from default

                        | resolutions, scale in percent as also scale

                        | by using aspect ratio.

                        |

                        - Crop   - crop picture or take a brush from picture.

                        |

                        - Rotate   - rotate picture in:

                        | a. custom degrees,

                        | b. -90 degrees

                        | c. +90 degrees

                        | d. 180 degrees

                        |

                        |
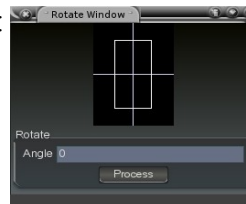
                        - Flip   - flip image horizontally and vertically

                        |

                        - Effects   - will display available effect list with preview window to see how effect looks like after application.
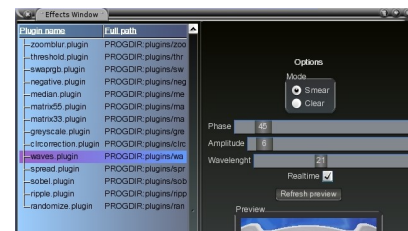
Brush ------------------+
              |
              | - Load   - load brush (asl requester will appear)
              |
              | - Save As   - save brush (save window will appear),

Windows --------------+
              |
              | - Grid   - open/close grid window
              | Add X – will add pixel to mouse pointer
              | position in x axis,
              | Add Y – this same but in y axis,
              | Width – width of lines skipped horizontally,
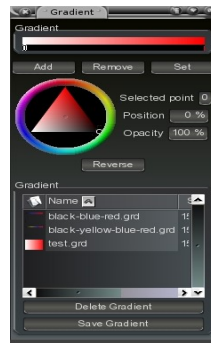 | Height – height of lines skipped vertically.
              | - Color - open/close color/palette window
              | Color window allows user to select
              | foreground, background color.
              | Switch between default palettes,
              | load and save it.
              |
              | - Gradients   - open/close gradient window

                                       Gradient window allows user to
                                       manage gradients used in fill
                                       gradient mode. It's possible to add
                                       and remove points, change position,
                                       opacity and color. By using file
                                       selector gradients can be loaded or
                                       saved.

Settings ----------------+
              |
              | - Preferences - open/close preferences window
              | inside you can setup:
              | a. displaying or not mouse position
              | b. invert colors for whole pen
              | preview buttons
              | c. accept requester disabled
              | allows you to skip most requesters
              | d. undo levels show you how many
              | undo/redo operations you can do
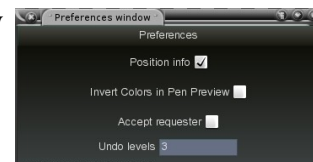
| by entering value inside "Undo levels".
| e. "preview effect gadget size" determine size of preview effect
| gadget in effect window. By entering new values and pressing "set
| size" you can set width and height preview in effect window
|
- Snapshot   - save windows/gadgets positions
|
- UnSnapshot   - release windows/gadget positions
|
- MUI   - display MUI settings for sketch

2.3. Shortcuts

+/-   - zoom/unzoom

ctrl + c - copy brush from screen if area is selected

[- select smaller pen shape from prepared pen types

]   - select bigger pen shape from prepared pen types

Amiga + N - new picture

Amiga + O - open picture

Amiga + S - save picture

Amiga + D - save picture as

Amiga + ? - show information about program

Amiga + Q - quit from program

Amiga + U - undo

Amiga + R - redo

Amiga + E - resize picture

Amiga + U - crop picture/take brush

Amiga + T   - custom rotate

Amiga + [- rotate -90 degrees

Amiga +]   - rotate +90 degrees

Amiga + `   - rotate 180 degrees

Amiga + ,   - flip horizontally

Amiga + .   - flip vertically

Amiga + M   - open effect window

Amiga + J   - load brush

Amiga + K   - save brush

Amiga + G   - open grid window

Amiga + C   - open color window

Amiga + F   - open gradient window

Amiga + P   - open preferences window

3. ARexx commands

ARexx commands   arguments

```
LoadBrush     PATH/A
SaveBrush     PATH/A,FORMAT/A,ALPHA/A,QUALITY/A   PNG JPEG
DrawBrush     X1/A,Y1/A
DrawBezier    X1/A,Y1/A,X2/A,Y2/AX3/A,Y3/A,X4/A,Y4/A
GetBrush      X1/A,Y1/A,X2/A,Y2/A
GetBrushWidth
GetBrushHeight

New           WIDTH/A,HEIGHT/A
Load          PATH/A
Save          PATH/A,FORMAT/A,ALPHA/A,QUALITY/A   PNG JPEG BMP SUNRASTER
Scale         WIDTH/A,HEIGHT/A,MODE/A
Rotate        ANGLE/A
Clear

DrawSetPen    PATH/A
DrawUnSetPen
SetAColor     R/A,G/A,B/A,A/A
DrawMode      MODE/A
FillMode      MODE/A

SelectFont    FONT//SIZE/A
DrawText      X/A,Y/A,TEXT/A

DrawPixel     X1/A,Y1/A
DrawCircle    X1/A,Y1/A,X2/A,Y2/A
DrawRect      X1/A,Y1/A,X2/A,Y2/A
DrawLine      X1/A,Y1/A,X2/A,Y2/A
DrawEllipse   X1/A,Y1/A,X2/A,Y2/A

GetWidth
GetHeight
GetRed                X/A,Y/A
GetGreen      X/A,Y/A
GetBlue       X/A,Y/A
GetAlpha      X/A,Y/A
```

4. FAQ

- Bug with filling areas
- This bug is well known, but there was no time to fix that

Some bugs are well known. But I think that Sketch is working find and can be used for many purposes. Thats why it's released with new MorphOS. These known bugs will be fixed as fast as possible and released in Sketch "service pack".

If you will find any bug in Sketch please send an e-mail
to: pawel.stefkos.stefanski@gmail.com
or: stefkos@wp.pl

5. Greetings

Here I want to thanks the following people and organisations:

MorphOS Team

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Emmanuel Lesueur	Nicolas Sallin
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Steven Vos	

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Jerzy Guc	Anna Wirska

and all forgotten people....